WHAT IS CLAIMED IS:

- 1. In the method of treating infertility disorders by administering an LH-RH Antagonist and inducing follicle growth by administration of exogenous gonadotropins, the improvement of administering an amount of LH-RH Antagonist so low as to only to suppress endogenuous LH while FSH secretion is maintained at a natural level and the individual estrogen development is not affected.
- 2. The method of claim 1 in which an LHRH-antagonist and exogenous gonadotropins and antiestrogens are combined.
- 3. The method of treating infertility disorders by administering a LH-RH Antagonist and inducing follicle growth by administration of exogenuous gonadotropin according to claim 1 wherein the antagonist is Cetrorelix.
- 4. The method according to claim 3 wherein the follicle growth is stimulated with other substances than exogenuous gonadotropins, as for example antiestrogens.
- 5. The method according to claim 3 wherein the follicle growth is stimulated with a combination of gonadotropins and other substances, as for example antiestrogens.
- 6. The method according to claim 5 wherein the follicle growth is stimulated with the antiestrogen Clomiphen.

7. The method according to claim 5 wherein the follicle growth is stimulated with the antiestrogen Clomiphen.

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- 8. The method according to claim 7 wherein the follicle growth is stimulated with Clomiphen and Controlled Ovarian Stimulation (COS) is started on day 2 after spontaneous menstrual bleeding using 100 mg Clomiphencitrate per day for 3 to 7 days and 0.2 mg to 1.0 of Cetrorelix is given starting on stimulation day 5 combined with hMG.
- 9. The method according to claim 6 wherein the follicle growth is stimulated with Clomiphen and COS is started on day 2 after spontaneous menstrual bleeding using 100 mg Clomiphencitrate per day for 3 to 7 days and 0.2 mg to 1.0 mg cetrorelix is given starting on stimulation day 6 combined with recombinant FSH.
- 10. The method according to claim 3 wherein after the inhibition of the action of natural LH caused by the LH-RH Antagonist preferably Cetrorelix, the follicle development is not stimulated (e.g. by the addition of gonadotropins).
- 11. The method according to claim 3 wherein the amount of subcutaneously given Cetrorelix is in the range of 0.1 to 5 mg of Cetrorelix/day during a multiple dosing posology.
- 12. The method of controlled ovarian stimulation in which Cetrorelix is applied starting cycle day 1 to 10, preferably on day 4 to 9 and ovulation can be induced between day 9 and 20 of the menstruation cycle.

- 13. The method according to claim 1 wherein the LH-RH Antagonist is given as a single or dual subcutaneous dose in the range of 1 mg to 10 mg, preferably 2 mg 6 mg.
- 14. The method according to claim 1 wherein the LH-RH Antagonist is given in a combination of as a single dose in the range of 1 mg to 10 mg, preferably 2 mg 6 mg, and a multiple daily dose in the range of 0.2 to 1.0 mg.
- 15. The method of controlled ovulation induction in which the LH-RH Antagonist, preferably Cetrorelix, is applied according to claim 7 starting on cycle day 6 to 10 and ovulation can be induced between day 7 11 of the menstrual cycle.
- 16. The method according to claim 9 wherein the ovulation is induced by recombinant LH.
- 17. The method according to claim 9 wherein the ovulation is induced by native LHRH.
- 18. The method according to claim 9 wherein the ovulation is induced by a LHRH agonist.
- 19. The method according to claim 9 wherein the ovulation is induced by HCG.

- 20. The method according to claim 11 wherein native LHRH or a LHRH antagonist are given to avoid luteal phase supplementation in preventing the negative effects of HCG during the luteal phase.
- 21. The method according to claim 11 wherein recombinant LH, native LHRH or LHRH antagonist are given to avoid ovarian hyperstimulation syndrome.